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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,393	03/25/2004	Noriko Sasada	500.43702X00	5544
20457	7590	04/11/2005	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873				DICKEY, THOMAS L
ART UNIT		PAPER NUMBER		
		2826		

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/808,393	SASADA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thomas L. Dickey	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 March 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 7-16 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 25 March 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 3/25/04.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Election/Restriction*

1. Applicant's election with traverse of embodiment 1 in the reply filed on 03/07/05 is acknowledged. Applicant asserts that claims 1-6 read on embodiment 1. The traversal is on the ground(s) that claim 1 is generic to all claims, and is based on applicant's premise that the features of claim 1 are substantially included in all claims. This is not found persuasive because applicant bases it on a false premise. The features of claim 1 are not included in all claims, for example claim 1 requires the metal-coated portion on the front surface of substrate is connected with the metal-coated portion on the rear surface by a metal-coated portion formed on the side surface of the substrate. None of claims 11,13,15, or 16, for example, have a metal-coated portion formed on the side surface of the substrate. Therefore these claims cannot have the missing portion connect the front and rear surfaces of the substrate.

The requirement is still deemed proper and is therefore made FINAL.

### *Oath/Declaration*

2. The oath/declaration filed on 03/25/04 is acceptable.

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***Drawings***

3. The formal drawings filed on 03/25/04 are acceptable.

***Priority***

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

5. The Information Disclosure Statement filed on 03/25/04 has been considered.

***Specification***

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by HAMERSLAG ET AL. (4,854,649).

Hamerslag et al. discloses a chip carrier including a substrate (Hamerslag et al. refer to the substrate as a "lead frame") 82 to be mounted (or, with regard to claims 3-6, simply mounted) a device (photo-detector 20. Note, with regard to claims 3-6, that photo-detector 20 is an optical semiconductor device), and a via-hole ("blank") 84 formed on passing through the substrate 82. Substrate 82 and blank 84 are completely covered by plating with two different metals, first with 50 to 150 microinches of electrolytic nickel, next with 50 to 80 microinches of soft gold (Note column 8 lines 21-25). Therefore front and rear surfaces of the substrate 82 are coated with a metal, a metal-coated portion is formed on a side surface of the substrate 82, the metal-coated portion on the front surface of substrate 82 is connected with the metal-coated portion on the rear surface by the metal-coated portion formed on the side surface of the substrate 82, and, additionally, the metal-coated portion on the front surface of the substrate 82 is connected with the metal-coated portion on the rear surface by the metallic via-hole 84. With regard to claims 5 and 6, because Hamerslag et al. discloses that all side surfaces of the substrate 82 are metal-coated, regardless of which side surface happens to be closest to device 20, a metal-coated portion is formed on the side surface closest to a position at which the optical semiconductor device 20 is mounted, and because Hamerslag et al. discloses that the side surfaces of the

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substrate 82 are completely (100%) metal-coated, an area of the metal-coated portion formed on the side surface of the substrate 82 is 100%, which is equal to or greater than 1/3 of the side surface. Note figures 8 (plan view) and 9A-9C (note that tab 32 is shown flat in blank 84 in figure 8, but has been folded out of blank 84, at right angles to substrate 82, in figures 9A-9C), column 8 lines 14-59, and column 9 lines 20-25 of Hamerslag et al.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas L Dickey whose telephone number is 571-272-1913. The examiner can normally be reached on Monday-Thursday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Thomas L. Dickey  
Patent Examiner  
Art Unit 2826  
04/05**